## INTRODUCTION

1. Phonemes

1-1. Vowels
Oral vowels found in this study are /i,e,a,o,u/. Nasalized vowels / $1, ~ e, a, 0, \alpha /$ are also found, but they are also pronounced as oral vowels in many words. Thus, nasalized vowels may not be distinctive from oral vowels. Creaky vowels /i, e, $\underline{i}, \underline{o}$, $\underline{u} /$ are also found. In most cases, they are placed immediately before the glottal stop consonant /?/. In this position, they are also pronounced as corresponding wowels without the creak, respectively, in many words. They also seem to be non-distinctive from the other vowels. In some cases, creaky vowels /a, e/ appear without the following glottal stop. The occurrence of /e, $\underline{i}, \underline{o}, \underline{u} /$ are much less than that of /a/.

Vowels /i/ and /u/ tend to be devocalized immediately after a voiceless consonant, and they often tend to lose their value completely at the word final position especially. Such vowels are shown in parentheses.

A vowel of the initial syllable of a word tends to be pronounced long in isolation though it tends to be pronounced short in a sentence. In most cases, such a vowel is describeld as a long vowel in text. In relation to this phenomenon, a vowel /u/ or /o/ at the initial syllable tends to be pronounced as /w/ when it is followed by one of the non-back vowels /i, e, a/. In these cases, the /w/ is also allowed. Furthermore, when /a/ is preceded by /o/ or /u/, a transitional phone /w/ is often heard between the two vowels. In the case that /a/ is preceded by /e/ or $/ i /$, a transitional sound $/ \mathrm{y} /$ is often heard between the two sounds.

It is noted that the beginning of glottal vibration of vowels tends to be strong at the word initial position and that the rising is clear. In fact, there are several words which may be described as the vowel preceded by the glottal plosive [?]. However, even these words are sometimes pronounced without [?], though the beginning of the voice is clear and strong. Furthermore, there are no words found that are distinctive from each other due to the presence of the preceding glottal plosive [?] at this position. Thus, the glottal plosive at the word initial position is not con-
sidered to be phonemic and in most cases, it is omitted in the description. However there are a few cases described where [?] is always heard extremely clearly in any utterance.

1-2. Consonants
Consonants found in this study are shown in Table 1 , where phonemes in " $\}$ " are found in borrowed words only. In the table, /t'/ is found at the word initial position of only two words. /ts'/ at the word final position tends to lose its ejection when it is followed by a vowel with a low tone. The ejection of /t', ts', $t l^{\prime} /$ is weaker than that of $/ k ' /$, and especially /tl'/ tends to be pronounced like [tl?] in some cases. /k'/ tends to be pronounced as uvular when it is followed by either /u/ or /o/. /r/ is trill and the fricative /x/ also accompanies trill of the uvula.

A prenasalized voiced plosive [ng'g] is also found at the word initial position of two Swahili loanwords. However, this consonant is also pronounced as [g] without prenasalization, and it is omitted from Table 1.

Table 1:

> labial dental \& lateral palatal velar glottal alveolar

Plosive \&
Affricate

| voiced | b | d |  | dl | j | g |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| voiceless | p | t |  | tl | c | k |
| aspirated | ph | th |  |  | ch | kh |
| ejective |  | $t^{\prime}$ | ts' | t1' |  | $k^{\prime}$ |

## Fricative

 voiced voiceless f s h1 \{sh\} $x$ hApproximant

| $\mathbf{w}$ | $r$ | 1 | $Y$ |
| :--- | :--- | :--- | :--- |

Nasal
m
n
\{ny\}
ng'

Besides the above consonants, click consonants are also found. They are shown in Table 2.

Table 2:
dental alveolar lateral
Clicks

| voiceless | $/$ | $\neq$ | $/ /$ |
| :--- | :--- | :--- | :--- |
| aspirated | $/ \mathrm{h}$ | $\neq \mathrm{h}$ | $/ / \mathrm{h}$ |
| glottalized | $/ ?$ | $\neq ?$ | $/ / ?$ |
| nasalized | $/ \mathrm{n}$ | $\neq \mathrm{n}$ | $/ / \mathrm{n}$ |

2. Tones

A tonal analyeis has not been completed yet. However,
this language is one of the tone languages, and there are four tones, i.e., a high level tone, a low level tone, a rising tone and a falling tone. There is the fifth tone that may be a mid level tone or a downstep high tone. Some examples which are distinctive only in tones are shown below.

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/?íná (sand, 73-7a) vs /?ínà (breast, 2-7)
/néè (bush, 71-8) vs /nèé (cut, 64-1a)
\(\neq\) nèé (laugh, 57-4) vs fnéè or \(\neq n \hat{e}\) (day, 74-3)
//?áng'ki (fight, 56-1) vs //?ǎng'ki (go down, 46-11)
//?éé (betrothal present, 28-9a) vs //?èe (to skin
    with a knife, 34-33a)
//?óó (rain, 69-15a) vs //?ơó (gather, 48-18) vs //?ô
        (sleep, 44-4)
//nô-kò (children, 27-31b) vs //nókô (wash, 17-1)
//nóó (milk, 32-19) vs //nòo or //nô (child, 27-30a)
ámé (tonsilitis, 8-15c) vs àmé (bring up, 29-13)
bobá (stalk of millet, 40-54) vs boba (mushroom, 40-53)
cháá (pot, 21- 2a) vs chàá (tears, 6-2)
hámá (wipe, 26-11) vs hàmá (abuse, 52- la)
hlàá (goat, 32-27) vs hláá (kind, good, \(75-60 a\) )
jíjín (particular insect, 39-35) vs jijjin (fountain,
    72-8)
kókó (fowl, 38-19) vs kòkó (grandfather, 27-16a)
mâ (tasty, 23- la) vs má or máa (decrease, 59-33a)
pèe (put, 50-53) vs pée (and then you(pl), 80-5c)
swê (pus, \(10-10\) ) vs swé or swée (to skin with hands,
    34-34a)
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swéng'ká (hoarseness, 12-17) vs, swèng'ká (boil, 11-1)
tlâ (door, 24-5) vs tlă or tláa (carry, 61-17b)
tl'â (bark of tree, 37-11a) vs tl'àá (take, 15-19c)
tl'éé (funeral, 31-13) vs tl'èé (deduct, 59-43a)
ts'áá (drink it, 22-10b) vs ts'áa or ts'â (water, 49-1a)
ts' úk'色 (smoke, 48-4) vs ts'uk'á (lid, 21-5)
xóxóng' (centipede, 39-41) vs xòxơng' (beads, 18-5)

## 3. Syllable Structure

Syllables of this language consist of "(C)V" and "CVC", except a syllabic nasal " m " found in Swahili loanwords only. In the case of "CVC", the final consonant is restricted to "m", "n", "ng'" or "?". "s","k","kh","k'","x" and "r" are also placed in the final position of a syllable, but they seem to be the result of the disappearance due to vowel devocalization.

## 4. Nouns

A noun consists of a stem and a suffix. The suffix indicates gender and number. The gender is divided into masculine ( $m$ ), feminine ( $f$ ) and neuter ( $n$ ); and the number, into singular ( sg ) and plural ( pl ). In the case of neuter, the singular and the plural have the same form. Some examples of suffixes are shown below.

Table 3:

| $\quad \mathrm{sg}$ |  | pl |
| :--- | :--- | :--- |
| m | f | n |
| 1. mekeba-e(e) | mekeba-s(u) | mekeba |
| 2. haba-i | haba-is(u) | mekeba-so (orphan) |
| 3. tl'wee-se | tl'wee-sus(u) | haba-iso (parent) |
| 4. tata |  | tl'wee-wasiso (witch) |
|  | iyoo | tata-x (father) |
|  |  | iyoo-x (mother) |

5. Verbs and Adjectives

In many cases, the noun form of a word is the same as the verb form. However, they are identified by the position of a subject marker (which is not shown in text) and some strategies in sentences (Dalgish, 1979; Kagaya, 1990).

Adjectives are also used as verbs. There are some verbs which have different forms depending on the number of the subject. There is one verb found whose form is different depending on the number of the object. Some examples are shown below.

| (1) subject=sg | subject=pl |  |
| :---: | :--- | :--- |
| hik'(i) | ni? | go (to) |
| ie | ne | stay (to) |
| tha(a) | giribe | run (to) |
| fawe | fhoo | fall (to) |
| //ume | hlee | stand (to) |
|  |  |  |
| (2) object=sg | object=pl |  |
| siee | tlaa | carry (to) |

6. Abbreviations and Symbols in Text
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-: morpheme boundary
^: or
sth: something
sb: somebody
N : noun
Vi: intransitive verb
Vt: transitive verb
m ; masculine singular
f; feminine singular
n; neuter singular
sg; singular ("sg" for a verb means that the subject
    of the verb is singular.)
pl; plural ("pl" for a verb means that the subject of
    the verb is plural.)
obj=sg; in the case that the object of a verb is
    singuar
obj=pl; in the case that the object of a verb is
    plural
<Sw; borrowed from Swahili
<Eng; borrowed from English
<Ny; borrowed from Nyaturu
<B; borrowed from one of the Bantu languages
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